

Fig 4 shows an embodiment of the invention wherein desired products which are the imaginary components of weighted real inputs to a 64-point DFT are computed and added to sums of products which are the DFT outputs, with desired product computation by a single multiplier used once to compute $x[1] \sin(2\pi/64)$ and intermediate terms and used again to compute $x[1] \sin(4\pi/64)$ using fed-back intermediate terms.

In the section REFERENCE NUMERALS IN DRAWINGS with section header on page 10 and body on pages 10 and 11, page 11 line 16 has been amended as follows:

64 a 16-bit decimal value of $\sin(2\pi/64)$

66 DFT weight component $\sin(2\pi/64)$

68 DFT weight component $\sin(4\pi/64)$

70 multiplier for computing the product of $x[1]$ and $\sin(2\pi/64)$

72 desired product $x[1] \sin(2\pi/64)$

74 adder for computing the sum of products $\text{Im}\{X[1]\}$

76 DFT output $\text{Im}\{X[1]\}$

78 additional products of other DFT inputs contributing to $\text{Im}\{X[1]\}$

80 multiplier for computing the product of $x[1]$ and $\sin(4\pi/64)$ using intermediate terms from computation of $x[1] \sin(2\pi/64)$

82 intermediate terms from computation of $x[1] \sin(2\pi/64)$

84 desired product $x[1] \sin(4\pi/64)$

86 adder for computing the sum of products $\text{Im}\{X[2]\}$

88 DFT output component $\text{Im}\{X[2]\}$

90 additional products of other DFT inputs contributing to $\text{Im}\{X[2]\}$

92 a multiplier for computing the desired product $x[1] \sin(2\pi/64)$ and also the desired product $x[1] \sin(2\pi/64)$, the latter using intermediate terms of the former

Figures:

Applicant has furnished the drawings Figure 3 and Figure 4, which appear separately on the next two pages of this amendment.